

ISDH Radiologic Health Section  
ISDH THERAPY ACCELERATOR  
ANNUAL CALIBRATION SUMMARY

1. Facility Registration Number \_\_\_\_\_ 2. Physicist's Signature \_\_\_\_\_  
3. Inspection Date \_\_\_\_\_ (code)  
4. Previous Inspection Date \_\_\_\_\_ 5. Add this machine ☐ 6. Delete this machine ☐  
7. New Owner: \_\_\_\_\_

A. Machine Number	B. Machine Design (Use Codes)	C. Location	D. Manufacturer (Use Codes)	E. Date of Manufacturer	F. Model and Serial Numbers

**QUALITY MANAGEMENT PROGRAM:**

Submit the following departmental quality assurance documents if changes have been made to the documents submitted with the Initial Commissioning Survey:

- Treatment planning computer and dose calculational algorithm QA procedures
- Patient chart review policy and procedures
- Weekly output constancy check policy and procedure
- Monthly output spot check procedure

**DOSIMETRY SYSTEM AT FACILITY:**

Cylindrical Chamber: Manufacturer/Model \_\_\_\_\_ ADCL Calibration Date: \_\_\_\_\_  
Parallel Plate Chamber: Manufacturer/Model \_\_\_\_\_ N<sub>gas</sub> Derivation Date: \_\_\_\_\_  
Electrometer: Manufacturer/Model \_\_\_\_\_ ADCL Calibration Date: \_\_\_\_\_  
Date of Aneroid Barometer Intercomparison: \_\_\_\_\_ Date Annual Calibration Completed: \_\_\_\_\_  
Calibration Protocol: \_\_\_\_\_ Frequency of Constancy Check Performed on Dosimetry System: \_\_\_\_\_

Mechanical Parameters		Tolerance <sup>1</sup>
Gantry Rotation Isocenter	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Collimator Rotation Isocenter	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Table (Couch) Rotation Isocenter	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Field Size Readouts	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Gantry Angle Readouts	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Collimator Angle Indicator	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
ODI Accuracy & Linearity	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Light/Radiation Field Congruency	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Laser Alignment System Accuracy	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	

<sup>1</sup>The qualified radiation oncology physicist shall specify tolerance values based upon accelerator manufacture specifications and the most recent published standards. Corrective action is required for measured data that exceeds the stated tolerance.

Emergency Off Switches	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>
Door Interlock	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>
Dosimetry Interlocks <sup>2</sup>	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>
Safety Interlocks <sup>3</sup>	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>
Audio Communications System	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>
Visual Monitor System	Operational: Yes <input type="checkbox"/> No <input type="checkbox"/>

Photon Beam Parameters				Tolerance <sup>1</sup>
Nominal Energy (MV)				-----
Ionization Ratio				-----
Flatness	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Symmetry	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Field Size Factors	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
PDD / TPR Values	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Output Calibration	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Performed
Output / MU Reproducibility	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Monitor Chamber Linearity	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Wedge / Compensator Transmission Factors	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Tray / Custom Block Transmission Factors	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Open Field Isodose Lines (central axis)	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Wedge Isodose Lines (central axis)	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Constancy Check Device Calibration	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Performed
Independent Output Check Date of Check _____	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	

<sup>2</sup>Energy (bending magnet current), flatness, symmetry, temperature and compensation, et cetera.<sup>3</sup>Target slide or scattering foil, dose chamber slide, dose rate, et cetera.

Electron Beam Parameters				Tolerance <sup>2</sup>
Nominal Energy (MeV)				-----
Mean Incident Energy				-----
Flatness: (Cone Size _____)	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Symmetry	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Output Calibration	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Performed
Output / MU Reproducibility	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Constancy Check Device Calibration	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Performed
Independent Output Check Date of Check _____	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	

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Mean Incident Energy				-----
Flatness: (Cone Size _____)	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
Symmetry	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	Sat <input type="checkbox"/> Unsat <input type="checkbox"/>	
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